

## WHAT IS CLAIMED IS:

1. An apparatus for controlling brightness switching between a portable device and a docking station, comprising:

a detection device for generating an installation correctness signal when the portable device is correctly mounted on the docking station; and

a signal selector comprising a first input pin in a connector coupled to a mated connector of the docking station for receiving a brightness control signal from the docking station, and a second input pin for receiving a brightness control signal from the portable device,

wherein the signal of the first input pin is selected for output when the signal selector receives the installation correctness signal from the detection device.

2. The apparatus as claimed in claim 1, wherein the signal selector comprises first to fifth resistors, a first capacitor, and first to fifth transistors, the first input pin being connected to the first capacitor, the second resistor, and a gate of the first transistor respectively, the first capacitor being connected to a low level, the second resistor being connected to a high level, a source of the first transistor being at a low level and a drain thereof being coupled to the third resistor and a gate of the second transistor respectively, the third resistor being at a high level, a source of the second transistor being at a low level, the second input pin being coupled to a gate of the third transistor, the source of the third transistor being at a low level and a drain thereof being coupled to an emitter of the fourth transistor, the fourth resistor, and a gate of the fifth transistor respectively, the fourth resistor

being at a high level, a base of the fourth transistor being coupled to the detection device for receiving the installation correctness signal therefrom and an emitter thereof being at a low level, a source of the fifth transistor being at a low level and a drain thereof being coupled to a drain of the second transistor, the fifth resistor, and an output of the signal selector respectively, and the fifth resistor being at a high level.

3. The apparatus as claimed in claim 1, wherein the first, second, third, and fifth transistors are N-channel logic level enhancement mode field effect transistor and the fourth transistor is a PNP transistor.

10 4. The apparatus as claimed in claim 1, further comprising an operational amplifying buffer having an input pin and an output pin, the operational amplifying buffer being coupled to the output of the signal selector for increasing the driving capability of the portable device.

15 5. The apparatus as claimed in claim 4, further comprising a microprocessor and a digital to analog converter (DAC), the DAC having an input pin coupled to a output pin of the microprocessor and an output pin coupled to the output pin of the operational amplifying buffer, the microprocessor being adapted to execute a program for generating a PWM brightness control signal to control the brightness of the portable device

20 6. The apparatus as claimed in claim 5, wherein the DAC is integrated into the microprocessor.